

PowerPad®



**Safety and
Instruction
Manual**

Congratulations on purchasing an **ELECTROVAYA** PowerPad® product!

This PowerPad® is designed to extend the run-time of portable computers to achieve true portability.

This significantly reduces your need to continually recharge and will provide you with enhanced productivity and mobility.

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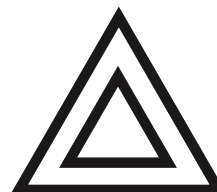


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Notice

Please read these instructions in their entirety before using your PowerPad®. All batteries contain energy and should be used, stored, and disposed of in an appropriate manner. Not all portable computers are compatible with the PowerPad®. Please consult our website at www.electrovaya.com for a complete listing of compatible brands and models. The PowerPad® has been shipped in a partially discharged state and will reach full capacity after its first recharge.



*Caution: Misuse or abuse of the
PowerPad® may result in personal injury or fire.*

SAFETY INFORMATION

Read these instructions carefully and save them for future reference.

This battery is designed to provide a safe and transportable form of energy when handled under conditions of normal and intended use.

It should always be used in a manner consistent with the manufacturer's recommendations and guidelines.

Do not disassemble the battery. Never puncture, drop, crush, throw, hit, open, modify or otherwise mutilate the battery or its casing.
Do not submerge. Do not expose the battery to heat above 60°C (140°F).
Do not incinerate. Do not insert any foreign object into the charging port.
If the battery is misused or abused, this may result in personal injury from heat, smoke, fire or explosion.

Keep the battery away from children. Always dispose of used batteries in accordance with local regulations. Do not incinerate.

- Use only AC adaptors supplied by Electroveya or by the manufacturer of your portable computer. Please consult our website at www.electroveya.com for a complete list of compatible brands and models of portable computers.
- Do not charge your PowerPad® with an AC adapter that has an output voltage greater than 24 Volts as this may cause damage to the PowerPad®.
- For some computer brands, a new AC adapter may be required, which you may purchase separately from Electroveya. See "Charging the PowerPad® Battery" for more details.
- Do not use AC adapters with reversible polarities.
- In order to reduce the risk of overcharging, do not charge the PowerPad® for more than 12 consecutive hours.
- Do not charge the PowerPad® on airplanes.

Storage & Handling

- Always store the battery in a cool and dry place between 0°C (32 F) and 20°C (70°F), and away from flammable materials.
- The Battery should not be heated or exposed to temperatures exceeding 60°C (140°F); exposure may lead to heat, smoke, fire or explosion. If battery smokes, swells, or emits a strange smell due to heat exposure, discontinue use and, if possible, move battery away from the heat source and stay away from it until it cools.
- Do not submerge the battery in water or any other liquid.
- It is recommended that the battery be kept out of the reach of children.

Disposal

- Do not place in fire.
- Do not incinerate.
- This Battery should be disposed of in accordance with local regulations.

IN CASE OF EMERGENCY

Fire / Smoke Emission

- Batteries contain flammable/combustible material that may be ignited or give off gases when heated or are in contact with sparks or flames. Batteries may explode, release noxious materials or cause burns.
- In the unlikely event of fire, smoke emissions and/or vapor release, evacuate the immediate area of all unnecessary personnel and ventilate the area.

Contact / Ingestion

- Chemicals within the battery while being non-toxic may cause skin burns, eye burns and respiratory tract burns if there is any accidental exposure or contact with any of these tissue membranes.
- In the event that the battery chemicals come into contact with the skin or eyes, flush area immediately with generous amounts of fresh water, and seek immediate medical attention.
- In case of contact with eyes, continue flushing for at least fifteen minutes.



- **For contact with skin, wash the affected area with soap and water. Dry gently with towel. Seek immediate medical attention.**
- **If fumes are inhaled, leave the immediate area. If not breathing, give artificial resuscitation. If breathing, give oxygen. Seek immediate medical attention.**

- **If Battery material is ingested, give one or two full glasses of water to dilute material. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical attention.**

Fire

- Batteries contain flammable/combustible material which may be ignited by heat, sparks or flames. Vapors may travel to a distant source of ignition and flash back. Batteries may explode, release toxic materials or cause burns.
- In the event of fire and/or vapor release, evacuate the immediate area of all unnecessary personnel. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards.

GETTING STARTED

1. Read this Safety and Instruction Manual in its entirety prior to using your PowerPad® product.
2. Ensure your PowerPad® package contains both the PowerPad® and the PowerPad® connection cable and/or separate charge cable for your model of portable computer. Refer to Compatibility List for more details.
3. Using an approved AC adapter, charge the PowerPad® until fully charged. Charging time will vary by model.

See *"Charging the PowerPad®"*.

4. Connect the PowerPad® connection cable to both the PowerPad® and your portable computer.

See *"Connecting to the Portable Computer"*.

5. Optimize your portable computer's Power Management Settings.

See *"Optimizing Battery Life"*.

6. You are now ready to use your PowerPad® product. Please review *"Recommended Use of the PowerPad®"* and *"Safety Information"*.

7. Periodically monitor remaining battery capacity.

See *"Understanding the Fuel Gauge"*.

8. When a single red light appears on the fuel gauge, stop using the PowerPad® and recharge it. You may recharge more frequently if desired.

See *"Understanding the Fuel Gauge"*.

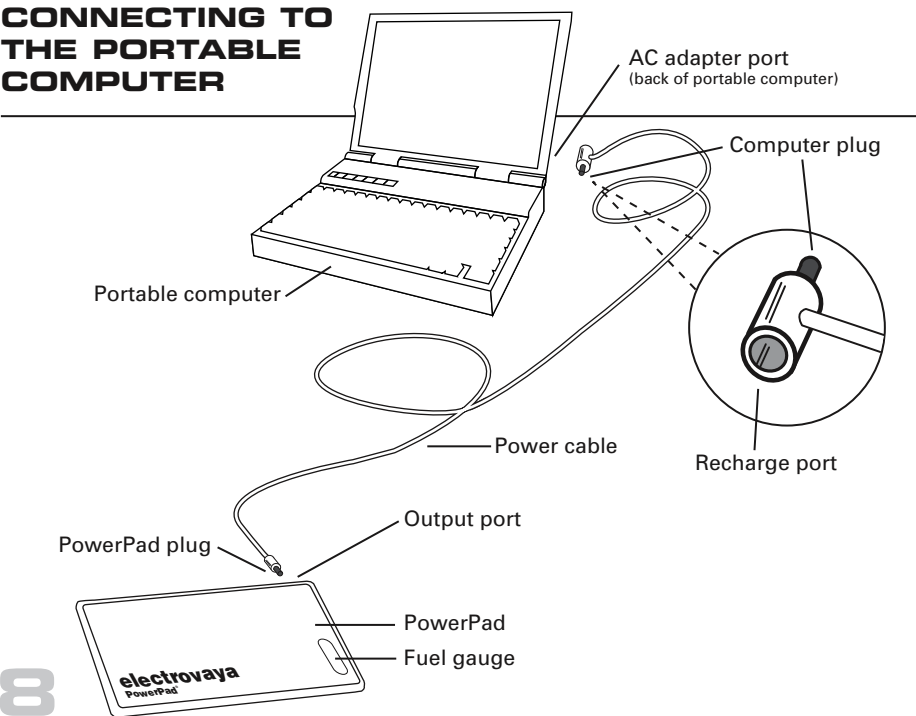
9. Replace the battery when time of use between charges diminishes.

SPECIFICATIONS

	PowerPad®160	PowerPad®120	PowerPad®80
Maximum Capacity	160 Wh	120 Wh	80 Wh
Run-time	Up to 6 times more	Up to 4 times more	Up to 3 times more
Charge-time*	80% charge in less than 4 hours with approved AC adapters.	80% charge in less than 3 hours with approved AC adapters.	80% charge in less than 4 hours with supplied Electrovara AC adapter.
Dimensions	11 3/4" x 8 3/4" x 3/8" 295mm x 220mm x 9.5mm	11 3/4" x 8 3/4" x 3/8" 295mm x 220mm x 9.5mm	6 5/8" x 8 3/4" x 3/8" 168mm x 220mm x 9.5mm
Weight	2.4 lbs.or 1.1 kg	1.9 lbs or 0.9kg	1.4 lbs or 0.65kg
Casing	Rugged metal casing	Rugged metal casing	Rugged metal casing
Operating Temperature	0°C (32°F) - 60°C (140°F)	0°C (32°F) - 60°C (140°F)	0°C (32°F) - 60°C (140°F)

Items included: PowerPad®, cables, AC Adapter (depending on model).
* Charge times may be longer than specified during the first few charge cycles.

CONNECTING TO THE PORTABLE COMPUTER



RECOMMENDED USE OF THE PowerPad®

The PowerPad® is designed to work with portable computers and is not intended for any other use. The PowerPad® must be attached to the portable computer using only the PowerPad® connection cable provided.

It is recommended that the PowerPad® be used in conjunction with the portable computer's internal battery. This will ensure a backup of power and a seamless transfer of power supply from the PowerPad® to the internal battery in the event of a full discharge or accidental disconnection of the PowerPad® from the portable computer.

In this situation, however, it may be possible to charge your computer's battery through the recharge port of the connection cable while the PowerPad® is in use. The run-time of the PowerPad® will be reduced. It is recommended that the internal battery be charged separately from the PowerPad® to achieve optimal run-times.

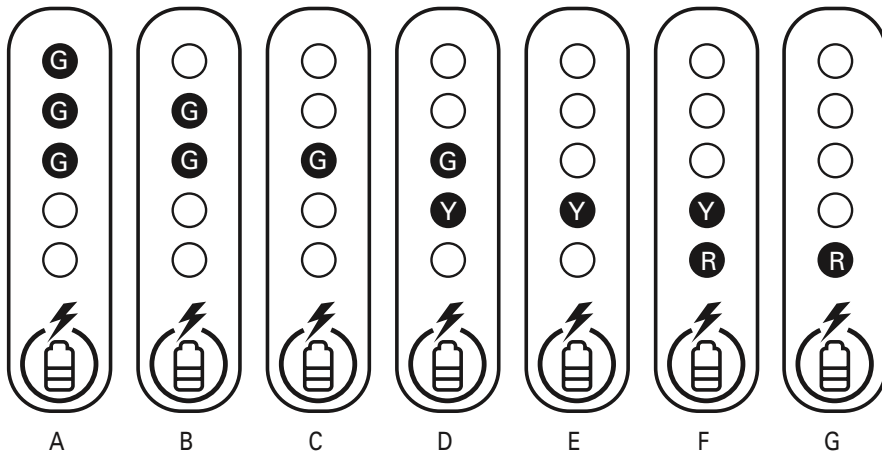
The optimal operating temperature is between 20°C (70°F) and 40°C (110°F). It is recommended that the PowerPad® not be exposed to direct sunlight or to temperatures less than 0°C (32°F). When exposed to temperatures below 0°C (32°F) and above 60°C (140°F), the PowerPad® will not operate; however, when the PowerPad® returns to a temperature between 0°C (32°F) and 60°C (140°F) the PowerPad® will again be operable.

UNDERSTANDING THE FUEL GAUGE

The PowerPad® uses a comprehensive fuel-gauge system to indicate its state of charge. The fuel gauge, which consists of 3 green lights, 1 yellow light and 1 red light, will normally be lit and will turn off automatically when the PowerPad® is not in use.

The fuel gauge displays the following information:

- A. 3 green lights indicate that the PowerPad® is 80% to 100% charged.
- B. 2 green lights indicate that the PowerPad® is 50% to 80% charged.
- C. 1 green light indicates that the PowerPad® is 30% to 50% charged.
- D. 1 green light and 1 yellow light indicate that the PowerPad® is 20% to 30% charged.
- E. 1 yellow light indicates that the PowerPad® is 10% to 20% charged.
- F. 1 red and 1 yellow indicates that the PowerPad® is less than 10% charged.
- G. 1 red light indicates the PowerPad® has been fully discharged and should be recharged.



Under abnormal operating conditions, such as extreme temperature conditions, the PowerPad® will not charge or discharge. Under these conditions the light panel will indicate 1 red light and 1 green light.

- While the PowerPad® is charging, the fuel gauge lights will blink every 7 seconds until the PowerPad® is fully charged, at which time the fuel gauge lights will remain lit.
- The lights that are "ON" will indicate the state of charge at that time.
- While the PowerPad® fuel gauge provides a relatively accurate state of charge during discharge, it more accurately shows the true state of charge when idle. It is therefore normal for the PowerPad® to alter its state of charge after it has been idle for more than an hour.
- To check the state of charge while the PowerPad® is idle simply connect the cable to the PowerPad®.

OPTIMIZING BATTERY LIFE

1. Invoking the Power Management settings of your portable computer may optimize the PowerPad's run-time. Refer to your computer's user manual to adjust the Power Management settings.
2. When not in use, disconnect the PowerPad® from the computer or AC adapter. Your portable computer will drain power from the PowerPad® even when not in use.
3. When not in use for a month or more, fully charge the PowerPad® prior to storing.

CHARGING THE PowerPad®

See "Safety Information - Charging"

• **DO NOT** charge or recharge the PowerPad® on airplanes.

- In order to optimize your charge, it is recommended that the PowerPad® be disconnected to the portable computer. If charged while connected from the portable computer, charge time will take significantly longer than when the PowerPad® is not connected to the portable computer.
- Do not charge your PowerPad® with an AC adapter with an output voltage greater than 24 Volts as this may damage the PowerPad®.
- For some computer brands, a new AC adapter may be required. You may purchase an AC adapter separately from ElectroVaya. This is necessary when the computer's AC adapter cannot supply sufficient voltage to fully charge the PowerPad®. Please consult the ElectroVaya PowerPad® Compatibility List.
- After achieving full charge and being idle for 1 hour, the PowerPad® may revert to 2 Green lights. The unit is fully charged, but due to a natural voltage settling after a large charge, the fuel gauge may communicate a lower capacity.

Recommended Charging Procedure

Apple PowerBook users refer to the next section for steps 1 and 2.

1. Disconnect the PowerPad® power cable from the computer.
2. Insert the AC adapter into the recharge port of the power cable.
Use only AC adaptors supplied by ElectroVaya or by the manufacturer of your portable computer. Please consult our website at www.electrovaya.com for a complete list of compatible brands and models of portable computers.
3. Connect the AC adapter into an electrical wall-outlet.
4. While charging is in progress, the fuel gauge will blink every 7 seconds and indicate the charge level of the PowerPad®. When the PowerPad® is fully charged, the fuel gauge will stop blinking.
5. After displaying 3 green lights the PowerPad® will not receive any further charge until it is partially discharged by at least 10%.

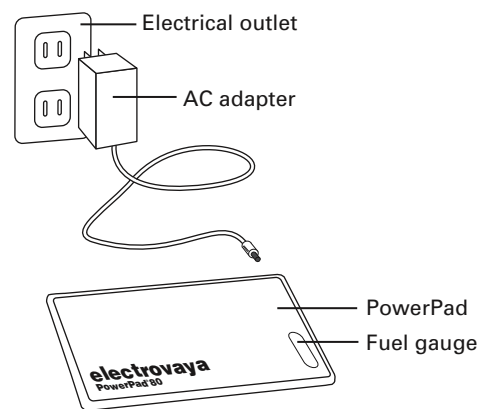
APPLE G3 and G4 POWERBOOK USERS

Three cables are included: An A90 Power Cable for G3 PowerBooks, and an A91 Power Cable for G4 PowerBooks and an A03 Charge Cable.

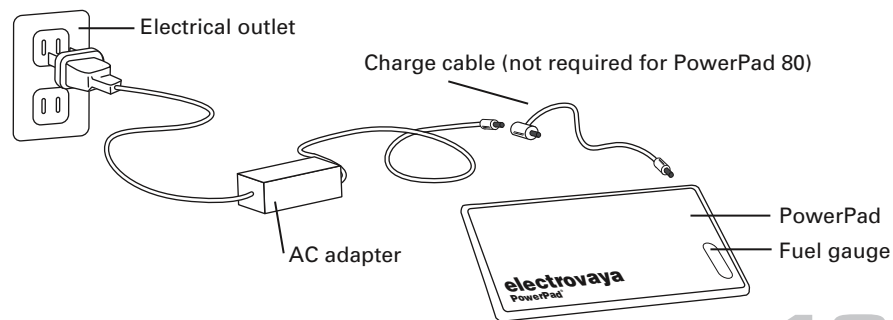
The Power Cable is used to connect the PowerPad® to the notebook. The Charge Cable is used to charge the PowerPad® using the ElectroVaya-supplied AC adapter.

1. Disconnect the PowerPad® (A90 or A91) power cable from the computer AND the PowerPad®.
2. Plug in A03 Charge Cable to the PowerPad®. Connect the ElectroVaya-supplied AC adapter into the charge cable. Use only AC adaptors supplied by ElectroVaya.
3. Return to the previous section for steps 3 - 5.

PP80 - Recharge PC



PP120 / PP160 - Recharge PC / MAC



Limited Warranty

Electrovaya offers a six (6) month warranty to the original purchaser.

Electrovaya warrants that the PowerPad® and its components will be in good working order under normal use and maintenance for a period of six (6) months from the date of purchase.

This Limited Warranty is void if Electrovaya determines that the Product has been serviced by anyone other than Electrovaya, or one of its authorized service centers, damaged from accident, misuse, misapplication, abusive operation, improper use and/or insufficient care or has been operated outside the parameters of the Safety and Instruction Manual.

Please see the Limited Warranty Registration Form enclosed for full details for the Limited Warranty. In order to activate your Limited Warranty, please return Limited Warranty Registration form to us within 30 days from the date of your product purchase.

